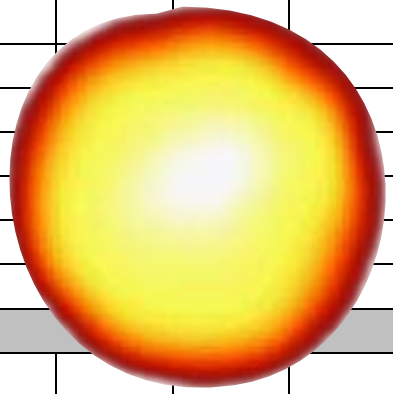
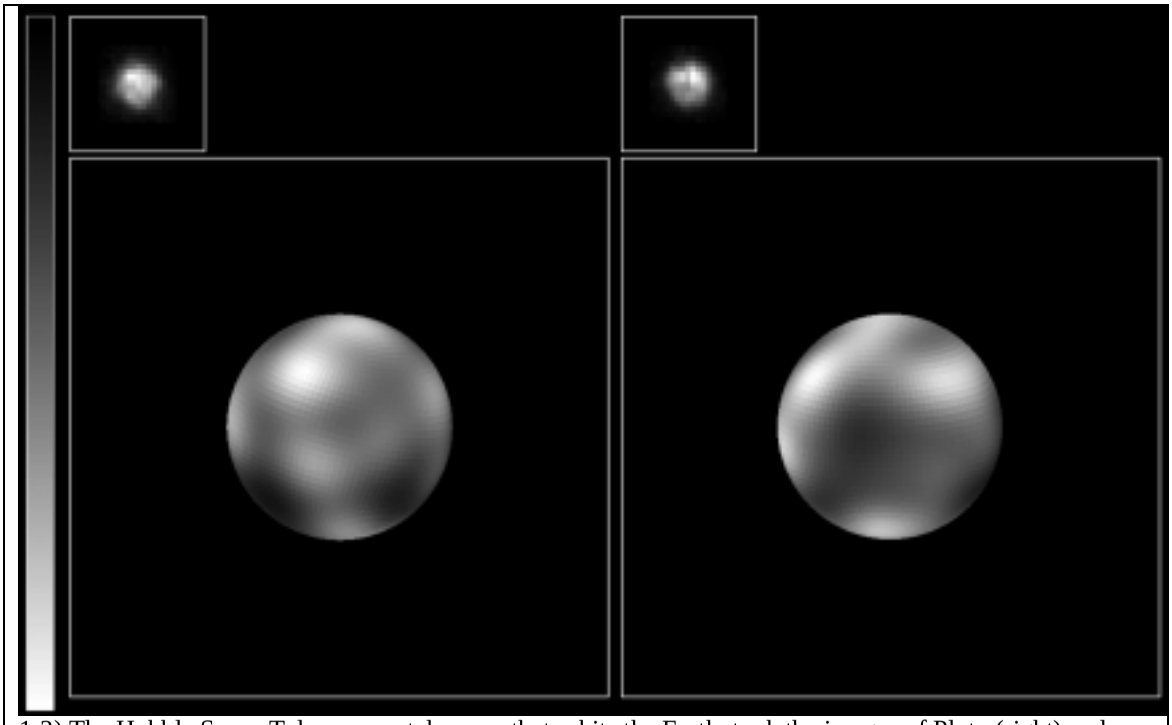
Fast Facts About Pluto

Planetary Parameters		Ratio (Pluto/Earth)
Planet Type	Terrestrial (i.e., a solid, rocky planet like Earth)	
Average Distance from Sun (kilometer)	5,906,400,000 compared to Earth's 149,600,000	39.48
Equatorial Diameter (kilometer)	2,247 as compared to Earth's 12,756	0.18
Mass (10^{24} kilogram)	0.0125 as compared to Earth's 5.9736	0.002
Volume (10^{10} kilometer^3)	0.616 as compared to Earth's 108.321	0.006
Average Density (gram/centimeter^3)	2.06 as compared to Earth's 5.52	0.37
Surface Gravity (meter/second^2)	0.66 as compared to Earth's 9.78	0.07
Magnetic Field (gauss-Rh^3)		
Orbital Parameters		
Year Length (One Orbit Around the Sun)	248 Earth Years	
Day Length (One Rotation on its Axis)	6.4 Earth days	
Inclination of Axis (degrees)	122 compared to Earth's 23.45	
Atmosphere and Climate		
Average Surface Temperature (C)	-225 at one bar as compared to Earth's 14.8	
Maximum Temperature (C)	-213 as compared to Earth's 47	
Minimum Temperature (C)	-236 at one bar as compared to Earth's -33	
Atmospheric Pressure at Surface	0.001 to 0.003 millibar (Earth = 1,014 millibar)	
Major Atmospheric Gasses	Nitrogen, Methane	
Summary of Water	Permanently frozen water ice	
Summary of Climate	Nitrogen atmosphere alternates between completely freezing out as nitrogen ice and sublimating to form a tenuous atmosphere.	
Planetary Features		
General Overview	Discovered in 1930, Pluto is the smallest, most distant, coldest, and darkest planet. During its winter, the entire atmosphere freezes onto the planet's surface as nitrogen ice. Its highly elliptical orbit and high density suggest that Pluto may be a Sun-orbiting, icy planetesimal.	
Composition of Poles	2 poles of unknown composition	
Core Composition	Rocky core	
Known Moons/Rings	1 moon, Charon, half as large as Pluto.	
Visits to Pluto		
1950-99	1994: first Hubble Space Telescope maps of Pluto.	



Some Views of the Planet Pluto



1-2) The Hubble Space Telescope, a telescope that orbits the Earth, took the images of Pluto (right) and Charon (left), Pluto's large moon -- half the size of Pluto! Because no spacecraft has ever visited this planet, these are our BEST images of Pluto and Charon. Computers enhanced the Hubble Space Telescope's images, but even so, almost no details are visible. It is so cold, that during the winter (which lasts 82 years!), the entire nitrogen atmosphere freezes onto the planet's surface as nitrogen ice. Some astronomers question whether Pluto is even a planet. They think it is more like the rocky, icy objects (called planetesimals) orbiting at the outer edge of our solar system.

2) This is another image of Pluto and Charon taken by the Hubble Space Telescope. Every few years, Charon comes between Earth and Pluto, eclipsing it. When Charon passes in front, it blocks parts of Pluto and the atmospheres show up against the blackness of space. In this way, astronomers can study the composition and characteristics of the atmospheres of these distant objects.